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EXAMINER

BLAIR, DOUGLAS B

ART UNIT

PAPER NUMBER

2152

DATE MAILED: 09/11/2002

4

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/476,613

Applicant(s)

DIAMANT ET AL.

Examiner

Douglas B Blair

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 4, 10, 12, 14-15, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 1, 4, 10, 12, 14, and 17 recite the limitation "said network traffic" in page 18, line 7, page 18, line 22, page 20, line 4, page 20, line 17, page 21, line 3, and page 21, line 22, respectively. There is insufficient antecedent basis for this limitation in the claim. It will be assumed, for examination purposes, that the applicant meant to refer to the "network data" and not "network traffic".

4. Claim 15 recites the limitation "method" in its preamble. There is insufficient antecedent basis for this limitation in the claim. It will be assumed, for examination purposes, that the applicant meant to use the word "medium" instead of method in claim 15 and all of its dependent claims.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-2, 12, and 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,222,855 to Kimber et al..

7. As to claim 1, Kimber teaches a method utilizing multiple network interfaces (col. 5, lines 60-67), comprising: receiving a first network data to be transmitted by a first network interface according to a protocol (col. 5, lines 60-67); determining whether the first network interface supports the protocol (col. 4, lines 55-67 and col. 5, lines 1-12, The system performs a protocol check.); if the protocol is not supported, then providing said first network data to a second network interface for processing of said first network data into a second network data according to the protocol (col. 6, lines 1-7); and transmitting said second network data with said first network interface (col. 6, lines 8-13).

8. As to claim 2, Kimber teaches the method of claim 1, wherein the first network interface does not support the protocol, the method further comprising: presenting said first and second network interfaces to a protocol stack as being a homogeneous team of network interfaces (Figure 3 shows a system featuring a homogeneous set of interfaces.).

9. As to claim 12, Kimber teaches a readable medium having encoded thereon instructions capable of directing a processor to: receive a first network data to be transmitted by a first network data to a second network interface according to a protocol (col. 5, lines 60-67);

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determine whether the first network interface supports the protocol (col. 4, lines 55-67 and col. 5, lines 1-12, The system performs a protocol check.); if the protocol is not supported, then provide said first network data to a second network interface for processing of said first network traffic into a second network data according to the protocol (col. 6, lines 1-7); and transmit said second network data with said second network interface (col. 6, lines 8-13).

10. As to claim 20, Kimber teaches in a computing device, a network interface team comprising: a first network interface lacking support for a protocol (col. 5, lines 60-67); and a second network interface supporting the protocol (col. 5, lines 60-67); said second network interface configured to process network traffic for the first network interface if said network traffic is to be transmitted according to the protocol (col. 6, lines 1-7).

11. As to claim 21, Kimber teaches the network interface team of claim 20, further comprising: a first receiver, communicatively coupled to said first network interface, for receiving network traffic to be transmitted by said first network interface (col. 5, lines 60-67); a second receiver, communicatively coupled to said second network interface, for receiving, communicatively coupled to said second network interface, for receiving network traffic to be transmitted by said second network interface (col. 5, lines 60-67); and a transferor, communicatively coupled with said first network interface and said second receiver, and configured to transfer network traffic to said second network interface for processing according to the protocol (col. 6, lines 1-7).

***Claim Rejections - 35 USC § 103***

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12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 3-5, 9, 13-15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,222,855 to Kimber et al. in view of U.S. Patent Number 6,438,678 to Cashman et al..

14. As to claim 3, Kimber teaches the method of claim 1; however Kimber does not explicitly teach encrypting the network data.

Cashman teaches a method wherein the protocol includes encrypting the first network data before submitting said first network data to a network (col. 7, lines 66-67 and col. 8, lines 1-17).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Kimber regarding a method for processing data with differing protocols with the teachings of Cashman regarding encrypting network data because both inventions deal with protocol translation systems.

15. As to claim 4, Kimber teaches the method of claim 1; however Kimber does not explicitly teach an encryption processor handling the network data (col. 7, lines 66-67 and col. 8, lines 1-17).

Cashman teaches a method comprising communicatively coupling a hardware-based encryption processor with said second network interface, said encryption processor performing said processing of said first network data.

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For reasons stated in the rejection of claim 3 it would be obvious to combine the teachings of Kimber and Cashman.

16. As to claim 5, Cashman teaches a method wherein the hardware-based encryption processor supports a primary mode for encrypting network traffic for a second network interface, and a secondary mode for encrypting network traffic for a first network interface (col. 8, lines 53-67 and col. 9, lines 1-3).

17. As to claim 9, Kimber teaches a method wherein the said first and second network interfaces operate in an adapter fault tolerance mode, and wherein said first network interface is a primary network interface, and said second network interface is a backup network interface (Figure 3 shows a system with backup interfaces.).

18. As to claims 13-15 and 19, they have similar limitations to claims 3-5 and 9 respectively and are thus rejected on the same basis as claims 3-5 and 9.

19. Claims 6-8, 10, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,222,855 to Kimber et al. in view of U.S. Patent Number 6,438,678 to Cashman et al. in further view of U.S. Patent Number 6,424,621 to Ramaswamy et al..

20. As to claim 6, Cashman teaches a method wherein said second network interface interleaves said primary mode encryption with said secondary mode encryption (col. 8, lines 53-67 and col. 9, lines 1-3), however; neither Cashman or Kimber mention adaptive load balancing in there systems.

Ramaswamy teaches a method wherein a first and second network interface operate in an adaptive load-balancing mode (Figure 3 shows a system with two network interfaces that performs load-balancing via the control processor.).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Kimber and Cashman regarding a method for processing data with differing protocols with encryption with the teachings of Ramaswamy regarding load balancing because load balancing improves network performance.

21. As to claim 7, Ramaswamy teaches the method comprising providing a third network interface supporting the protocol; wherein processing said first network traffic into said second network data is balanced across said second and third network interfaces (Figure 3 also shows a third interface, in which the load balancing occurs.).

22. As to claim 8, Ramaswamy teaches a method wherein said balancing is performed according to a workload of said second and third network interfaces (Figure 3).

23. As to claim 10, Kimber teaches the method of claim 1; however Kimber does not explicitly teach a load balancing system.

Ramaswamy teaches a method wherein a first and second network interface operate in an adaptive load balancing mode, and wherein said network interface interleaves processing network traffic for said second network interface with processing first network traffic into said second network interface (Figure 3).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Kimber and Cashman regarding a method for processing data with differing protocols with the teachings of Ramaswamy regarding load balancing because load balancing improves network performance.

24. As to claims 16-18, they have similar limitations to claims 6-8 respectively and are thus rejected on the same basis as claims 6-8.



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25. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,222,855 to Kimber et al..

26. As to claim 11, Kimber teaches the method of claim 1; however, Kimber does not explicitly say that the first interface is a backup for the second interface.

Kimber teaches a method wherein adapters operate in an adapter fault tolerance mode and the first and second adapters have backup network interfaces (Figure 3 shows a backup interfaces.).

It would have been obvious to one of ordinary skill in the Computer Networking art to combine the teachings of Kimber regarding a method for processing data with differing protocols with the teachings of Kimber regarding fault tolerant adapters because any of redundant interfaces could be used as a backup interface.

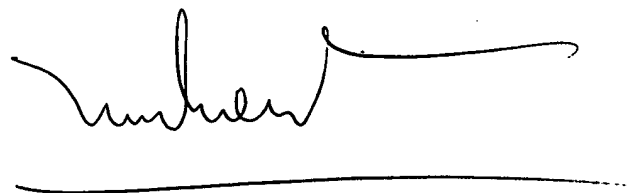
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B Blair whose telephone number is 703-305-5267. The examiner can normally be reached on 9am-6:30pm Mon-Thurs, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703)305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-9731 for regular communications and (703)305-9731 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Douglas Blair  
September 9, 2002

A handwritten signature in black ink, appearing to read 'Le Hien Luu', with a long horizontal line extending to the right.

LE HIEN LUU  
PRIMARY EXAMINER